

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P997697

Luminaire Tested: SA2XXRDP-B1005DB30-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997697
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXRDP-B1005DB30-4F0-XX-W2A-F
Description: Define 2 Regressed Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

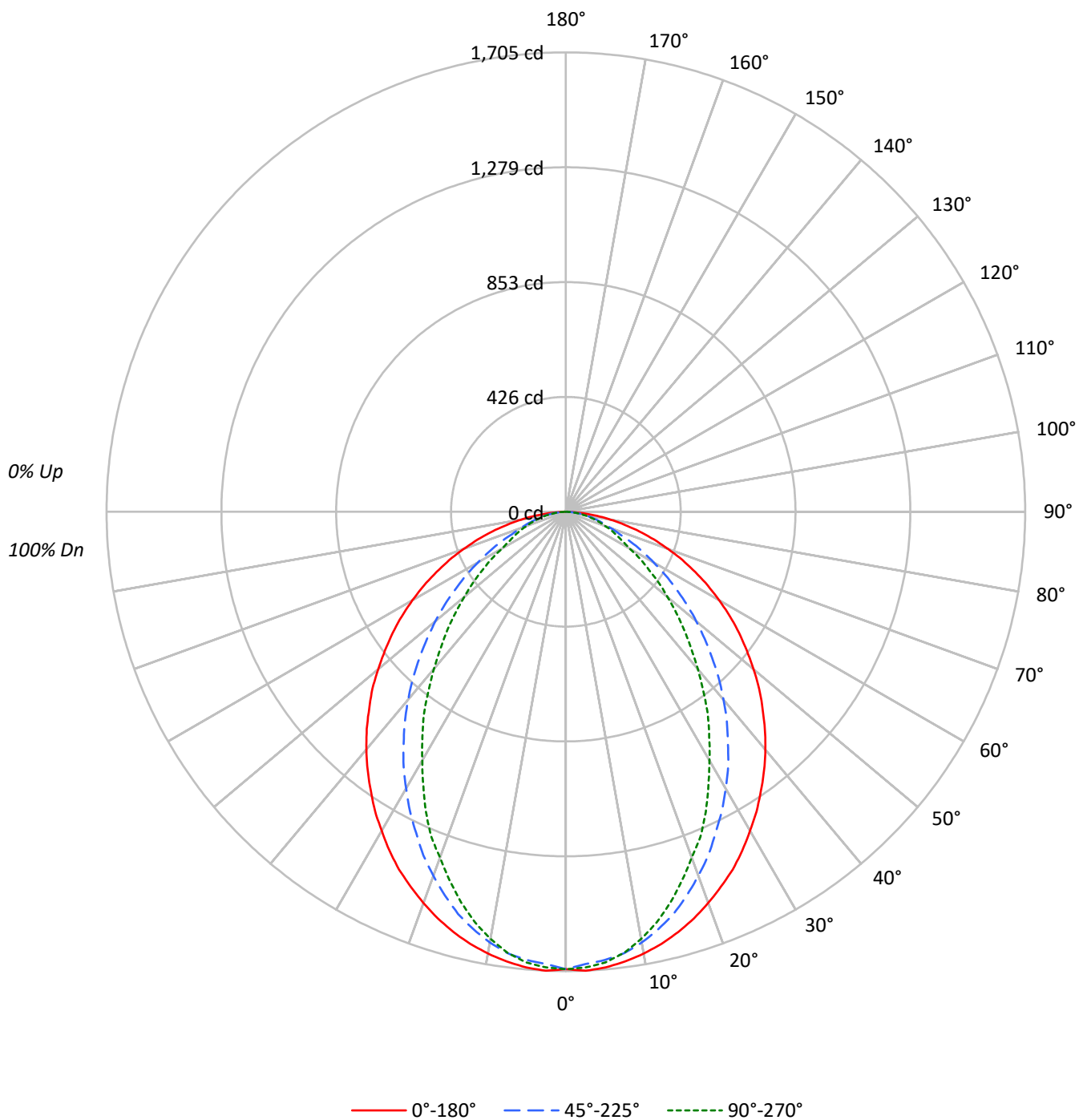
Lumens per Lamp: N/A
Luminaire Lumens: 3491.0 lumens
Efficiency: N/A
Efficacy: 56.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 61.3
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	98	107	103	100	97	99	96	94		95	93	91		92
2	101	94	87	82	98	92	86	81	88	83	79		85	81	78		82
3	93	83	76	70	90	82	75	69	79	73	68		76	71	67		74
4	86	75	66	60	83	73	66	60	71	64	59		69	63	58		66
5	79	67	59	53	77	66	58	52	64	57	52		62	56	51		60
6	74	61	53	47	72	60	52	46	58	51	46		57	50	46		55
7	68	56	47	42	67	55	47	42	53	46	41		52	46	41		51
8	64	51	43	38	62	51	43	37	49	42	37		48	42	37		47
9	60	47	39	34	59	47	39	34	46	39	34		44	38	34		44
10	56	44	36	31	55	43	36	31	42	36	31		41	35	31		41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26869	26869	26869
5°	26971	26533	26679
10°	26766	26099	25877
15°	26458	25326	24595
20°	26033	24220	23004
25°	25596	22966	21464
30°	24990	21676	19486
35°	24400	20275	17751
40°	23807	18823	15744
45°	23109	17195	13926
50°	22395	15549	12143
55°	21664	13777	10429
60°	20816	11916	8655
65°	19851	10012	7884
70°	18698	8247	7252
75°	17290	7517	6764
80°	15260	6718	6162
85°	12005	5303	5303

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 23109 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.1	4.6
10°-20°	436.7	12.5
20°-30°	613.1	17.6
30°-40°	668.4	19.1
40°-50°	614.3	17.6
50°-60°	482.4	13.8
60°-70°	314.0	9.0
70°-80°	161.7	4.6
80°-90°	41.3	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1209.0	34.6
0°-40°	1877.3	53.8
0°-60°	2974.0	85.2
0°-90°	3491.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3491.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1697	1697	1697	1697	1697	
5°	1697	1690	1670	1684	1679	161
15°	1614	1598	1545	1516	1501	455
25°	1466	1416	1315	1252	1229	674
35°	1263	1184	1049	952	919	790
45°	1032	929	768	659	622	797
55°	785	665	499	407	378	701
65°	530	406	267	215	210	525
75°	283	175	123	112	111	299
85°	66	34	29	29	29	79
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1697.4	1697.4	1697.4	1697.4	1697.4
2.5°	1705.1	1697.4	1680.5	1695.9	1692.8
5°	1697.4	1689.8	1669.8	1683.6	1679.0
7.5°	1683.6	1674.4	1652.9	1659.0	1651.4
10°	1665.2	1654.4	1623.7	1619.1	1609.9
12.5°	1642.1	1628.3	1586.8	1577.6	1560.7
15°	1614.5	1597.6	1545.4	1516.2	1500.8
17.5°	1582.2	1557.6	1493.1	1459.3	1434.8
20°	1545.4	1514.6	1437.8	1399.4	1365.6
22.5°	1505.4	1470.1	1381.0	1328.8	1305.7
25°	1465.5	1416.3	1314.9	1252.0	1228.9
27.5°	1417.9	1365.6	1253.5	1181.3	1146.0
30°	1367.2	1308.8	1185.9	1107.6	1066.1
32.5°	1318.0	1247.3	1121.4	1029.2	990.8
35°	1262.7	1184.4	1049.2	952.4	918.6
37.5°	1208.9	1124.5	981.6	875.6	837.2
40°	1152.1	1059.9	910.9	801.9	761.9
42.5°	1093.7	995.4	840.3	726.6	688.2
45°	1032.3	929.4	768.1	659.0	622.1
47.5°	973.9	864.8	698.9	589.9	556.1
50°	909.4	800.3	631.4	525.4	493.1
52.5°	846.4	731.2	566.8	465.5	436.3
55°	785.0	665.2	499.2	407.1	377.9
57.5°	722.0	599.1	439.3	353.3	328.7
60°	657.5	534.6	376.4	298.0	273.4
62.5°	594.5	471.6	322.6	248.9	236.6
65°	530.0	405.5	267.3	215.1	210.5
67.5°	468.5	344.1	215.1	188.9	184.3
70°	404.0	284.2	178.2	162.8	156.7
72.5°	342.6	228.9	149.0	136.7	133.6
75°	282.7	175.1	122.9	112.1	110.6
77.5°	222.7	124.4	96.8	90.6	87.6
80°	167.4	89.1	73.7	67.6	67.6
82.5°	116.7	59.9	50.7	47.6	47.6
85°	66.1	33.8	29.2	29.2	29.2
87.5°	24.6	12.3	12.3	10.8	10.8
90°	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	22.67	24.19	23.03	24.50	24.82	18.63	20.15	18.99	20.46	20.78
	3H	24.43	25.80	24.81	26.13	26.49	19.89	21.26	20.27	21.59	21.95
	4H	25.10	26.38	25.50	26.73	27.11	20.40	21.68	20.80	22.02	22.40
	6H	25.59	26.77	26.00	27.14	27.53	20.78	21.96	21.19	22.33	22.72
	8H	25.75	26.88	26.18	27.27	27.67	20.90	22.03	21.33	22.42	22.82
	12H	25.86	26.94	26.29	27.32	27.75	20.98	22.06	21.41	22.44	22.87
4H	2H	22.77	24.05	23.17	24.40	24.78	19.32	20.60	19.72	20.95	21.33
	3H	24.71	25.77	25.12	26.17	26.57	20.77	21.83	21.18	22.23	22.63
	4H	25.46	26.41	25.89	26.83	27.27	21.37	22.32	21.80	22.74	23.18
	6H	26.05	26.88	26.50	27.32	27.78	21.86	22.69	22.31	23.13	23.59
	8H	26.26	27.04	26.73	27.48	27.95	22.02	22.79	22.48	23.24	23.71
	12H	26.42	27.11	26.90	27.59	28.06	22.13	22.83	22.62	23.31	23.78
8H	4H	25.48	26.26	25.94	26.70	27.17	21.72	22.50	22.18	22.94	23.41
	6H	26.12	26.76	26.61	27.25	27.73	22.31	22.95	22.80	23.44	23.92
	8H	26.37	26.94	26.88	27.45	27.94	22.53	23.11	23.04	23.61	24.10
	12H	26.57	27.08	27.08	27.57	28.14	22.71	23.22	23.22	23.71	24.27
12H	4H	25.46	26.16	25.95	26.64	27.11	21.76	22.46	22.25	22.94	23.41
	6H	26.10	26.68	26.61	27.19	27.67	22.37	22.95	22.88	23.46	23.95
	8H	26.38	26.89	26.89	27.38	27.95	22.64	23.15	23.15	23.65	24.21